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1 ~~7. 41~~ The method of claim 1, further comprising selecting another path by  
2 sending a change-route request.

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1 ~~15.~~ A first system for use in a mobile communications network, comprising:  
 2 a communications module adapted to communicate over a packet-  
 3 switched network coupled to a second system, the first system being one of a base station  
 4 and a system controller and the second system being another one of the base station and  
 5 the system controller;

6 a storage element<sup>812</sup> containing one or more first addresses associated with  
 7 the first system; and

8 a control module<sup>810</sup> adapted to select one of plural paths over the packet-  
 9 switched network, each path defined by one address associated with the first system and  
 10 one address associated with (the node.)

1 ~~16.~~ The first system of claim 15, wherein the communications module is  
 2 adapted to communicate over a Gb interface provided in the packet-switched network.

1 ~~17.~~ The first system of claim 15, comprising the base station.

1 ~~18.~~ The first system of claim 15, comprising the system controller, the system  
 2 controller comprising a serving GPRS support node. <sup>SGSN</sup>

1 ~~19.~~ The first system of claim 15, wherein each path comprises a virtual  
 2 connection.

1 ~~20.~~ The first system of claim 15, wherein each address comprises an Internet  
 2 Protocol address.

1 ~~21.~~ The first system of claim 15, wherein each path is further defined by a  
 2 User Datagram Protocol port of the first system and a User Datagram Protocol port of the  
 3 second system.

1 ~~22.~~ The first system of claim 15, wherein the control module comprises a load  
 2 sharing task to select different paths for different mobile stations.

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1 23. The first system of claim 15, further comprising a GPRS Network Service  
2 layer, the Network Service layer comprising the control module.

1 24. The first system of claim 23, further comprising an upper layer, the  
2 Network  
3 Service layer exchanging primitives with the upper layer.

1 25. The first system of claim 24, wherein the primitives comprise an NS-  
2 UNITDATA-Request primitive carrying outbound data and an NS-UNITDATA-  
3 Indication primitive carrying inbound data, the NS-UNITDATA-Indication primitive  
4 containing a remote link selector parameter, and the NS-UNITDATA-Request primitive  
5 containing the remote link selector parameter and a local link selector parameter.

1 26. The first system of claim 25, wherein the control module is adapted to  
2 select an address associated with the first system based on the local link selector  
3 parameter. *lsp*

1 27. The first system of claim 26, wherein the control module is adapted to  
2 select an address associated with the second system based on the remote link selector  
3 parameter. *lsp*

1 28. An article comprising at least one storage medium containing instructions  
2 for recovering communications over a network between a system controller and a base  
3 station, the instructions when executed causing a first node to:  
4 disable an address in the first node, the first node being one of the base  
5 station and the system controller; and  
6 redirect subsequent data from the first node to a primary address of a peer  
7 node, the peer node being the other one of the base station and the system controller.

1 29. The article of claim 28, wherein the instructions when executed cause the  
2 first node to communicate data over a packet-switched, connectionless network.

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1        30.    A method for load sharing between communication ports on an originating  
2 device and a destination device where the communication link is an Internet Protocol-  
3 based communication link, comprising:

4                receiving a first message from an originating device on a communication  
5 port of a destination device, the communication port identified by an original Internet  
6 Protocol address;

7                determining which communication port on the destination device to use  
8 for subsequent messages in response to receiving the first message, the communication  
9 port to be used for subsequent messages identified by a new Internet Protocol address;

10               transmitting a change-route message from the destination device to the  
11 originating device, the change-route message specifying the new Internet Protocol  
12 address for messages transmitted from the originating device to the destination device.

1               31.    The method of claim 30, further comprising:

2                receiving the change-route message at the originating device; and  
3                changing a destination Internet Protocol address to the new Internet  
4 Protocol address for subsequent messages transmitted from the originating device to the  
5 destination device.

1               32.    The method of claim 30, wherein the originating device is a base station  
2 and the destination device is a serving GPRS (Global Packet Radio Service) support  
3 node.

1               33.    The method of claim 30, wherein the originating device is a serving GPRS  
2 (Global Packet Radio Service) support node and the destination device is a base station.

1               34.    The method of claim 30, further comprising transmitting subsequent  
2 messages from the originating device to the new Internet Protocol address on the  
3 destination device.

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1           35.     The method of claim 30, wherein load sharing is performed on a per  
2     mobile station basis.

1           (36.)    A data signal embodied in a carrier wave comprising instructions for  
2     performing implicit load sharing in a network between nodes in a wireless  
3     communications network, the instructions when executed causing a first node to:  
4                    receive a signal from a mobile station;  
5                    select a first address of one or more first node addresses to use for  
6     servicing the mobile station;  
7                    transmit a message containing the signal from the first node to a primary  
8     address of a second node;  
9                    receive another message from the second node, the other message sent  
10    from a second address associated with the second node; and  
11                   select a path based on the first and second addresses.

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1           (37.)    An article comprising at least one storage medium containing instructions  
2     for establishing communications between a base station and a system controller, the  
3     instructions when executed causing a first node to:  
4                    identify a plurality of paths in the network, each path defined by an  
5     address in the base station and an address in the system controller, the first node being  
6     one of the base station and system controller; and  
7                    select one of the plurality of paths to communicate data associated with a  
8     given mobile station.

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1           38.     The article of claim 37, wherein the instructions when executed cause the  
2     first node to:  
3                    select one of the plurality of paths by performing an implicit negotiation in  
4     which the path is defined by a source address of a message communicated by the base  
5     station and by a source address of a message communicated by the system controller.

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1        39.     The article of claim 37, wherein the network is a packet-switched,  
2 connectionless network, and wherein the instructions when executed cause the first node  
3 to select one of the plurality of paths by selecting one of a plurality of virtual connections  
4 on the packet-switched, connectionless network, each virtual connection based on a base  
5 station address and a system controller address.

1        40.     The article of claim 37, wherein the instructions when executed cause the  
2 first node to further select another path by sending a message from another source  
3 address.

1        41.     The article of claim 37, wherein the instructions when executed cause the  
2 first node to further select another path by sending a change-route request.

1        42.     The article of claim 41, wherein the instructions when executed cause the  
2 first node to send the change-route request containing an identifier of a mobile station.

1        43.     The article of claim 42, wherein the instructions when executed cause the  
2 first node to send the change-route request using a new source address, and to select the  
3 other path is based on the new source address.

1        44.     The article of claim 37, wherein the instructions when executed cause the  
2 first node to further:  
3                disable an address; and  
4                send a change-route request containing the disabled address to change a  
5 path for each mobile station assigned a path defined by the disabled address.

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